

Appendix F

US ACE 404 Summary

U.S. Army Corps of Engineers

BACKGROUND ON DREDGE AND FILL/WETLANDS REQUIREMENTS FOR
CONSTRUCTION ACTIVITIES

DEFINITIONS

Dredged Material: Material that is excavated or dredged from waters of the United States.

Fill Material: Material placed in waters of the United States where the material has the effect of:

- Replacing any portion of a water of the United States with dry land, or
- Changing the bottom elevation of any portion of a water of the United States.

Examples of fill material include rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in waters of the United States. The term “fill material” does not include trash or garbage.

Incidental Fallback. Redeposit of small volumes of dredged material that is incidental to excavation activity in waters of the United States when such material falls back to substantially the same place as the initial removal. Examples of incidental fallback include soil that is disturbed when dirt is shoveled and the back-spill from a bucket falls into substantially the same place from which it was initially removed.

Waters of the United States (United States Waters). See 40 CFR Part 122.2 for the complete definition. Waters include, but are not limited to:

- All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to ebb and flow of the tide,
- All interstate waters including interstate wetlands, and
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce.

Wetlands. Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do

support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

ACRONYMS

US ACE - United States Army Corps of Engineers

CWA - Clean Water Act

NWP - Nationwide Permit

PCN - Preconstruction Notification

APPLICABILITY

US ACE defines discharges of dredged material at 33 CFR 323. These discharges, which require permits under Section 404 of the CWA, include:

The addition of dredged material to a specified discharge site located in waters of the United States; the runoff or overflow from a contained land or water disposal area; and any addition, including redeposit other than incidental fallback, of dredged material, including excavated material, into waters of the United States that is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.

US ACE also defines discharges of fill material at 33 CFR 323. These discharges, which require permits under Section 404 of the CWA, include: placement of fill necessary for the construction of any structure or infrastructure in a water of the United States; building of any structure, infrastructure, or impoundment in waters of the United States requiring rock, sand, dirt, or other material for its construction; site-development fills in waters of the United States for recreational, industrial, commercial, residential, or other uses; causeways or road fills, dams and dikes, artificial islands, beach nourishment, levees, and artificial reefs; property protection and/or reclamation devices such as rip rap, groins, seawalls, breakwaters, and revetments; fill for structures such as sewage treatment facilities; intake and outfall pipes associated with power plants and subaqueous utility lines; placement of fill material in waters of the United States for construction or maintenance of any liner, berm, or other infrastructure associated with solid waste landfills; and placement of overburden, slurry, or tailings or similar mining-related materials in waters of the United States. Contact the state environmental or permitting office and the US ACE District Office to determine whether permits are required for the construction project.

SECTION 404 PERMIT PROCESS REQUIREMENTS

Section 404 requires that no discharge of dredged or fill material be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. When applying for a permit, a wetlands mitigation must be performed to show that the project: avoided wetland impacts where practicable; minimized potential impacts

to wetlands; and will provide compensation for any remaining, unavoidable impacts through activities to restore or create wetlands.

US ACE may issue permits, after notice and opportunity for public hearings, for the discharge of dredged or fill material into waters of the United States at specified disposal sites. Prior to issuing Section 404 permits, state approval must also be obtained (Section 401 certification). There are two types of Section 404 permits: general permits and individual permits. For discharges that have only minimal adverse effects, US ACE issues general permits. General permits may be issued on a nationwide, regional, or state basis for particular categories of activities. Attachment C includes a list of current Nationwide Permits (NWP). Individual permits are usually required for activities with potentially significant impacts.

General Permit Process. An NWP may require that the US ACE District Engineer (DE) of the construction activity be notified in a preconstruction notification (PCN). If required, the PCN should be submitted as early as possible. Within 30 days, the DE will determine whether the PCN is complete and may request additional information. The PCN review process will not begin until all required information is submitted. Construction activity may not begin until one of the following occurs:

- (1) Notification that the activity may proceed is received from the DE. This notification may include special conditions imposed on the specific construction activity.
- (2) Notification that an individual permit is required is received from the DE, and the individual permit is issued.
- (3) Forty-five days have passed since the DE received the complete PCN and no written notice has been received from the DE.

The text of the NWPs should be reviewed to assess whether a particular NWP applies to the construction project (see 67 FRN 2020 or the on-line guide at http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nationwide_permits.htm). Some items to check include:

NWP use limits (e.g., NWP 19 Minor Dredging only applies if the site dredges less than 25 cubic yards); and

Applicable waters (e.g., NWP 13 Bank Stabilization does not apply to special aquatic sites (i.e., sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes)).

If the construction activity is covered under an NWP, the site must comply with the general conditions listed for the permit. The US ACE District Office or state environmental department should be contacted for information on regional and state general permits.

Individual Permit Process. The following steps need to be completed to obtain an individual permit:

Application. To receive a Section 404 individual permit, operators must complete an Application for Department of Army Permit (available on line at: <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/eng4345a.pdf>). US ACE requires, among other things, that permit applicants describe the project and its purpose, the reasons for discharging dredged or fill material, types of material being discharged (and volume of each type in cubic yards), and the surface area of wetlands or other waters filled (in acres). Applicants must also submit one set of drawings showing location and character of proposed activity. The application is submitted to the DE having jurisdiction over the location of the proposed activity. (Note that states may contact the US ACE in conjunction with granting state approval for the project. The application process varies by state; contact the state and US ACE District Office for details.)

Public Notice. US ACE will issue a public notice once the complete permit application has been received. The notice includes the proposed activity, location, and potential environmental impacts.

Comment Period. The public comment period lasts between 15-30 days, depending on the proposed activity. The application and comments are reviewed by the US ACE and other interested federal and state agencies, organizations, and individuals. US ACE also determines whether an Environmental Impact Statement is necessary.

Public Hearing. Citizens may request that US ACE conduct a public hearing; however, public hearings are not usually held.

Permit Evaluation. COE, along with states and other federal agencies, evaluates the permit application, taking into account the comments received.

Permit Award or Denial. Based on the steps above, US ACE may either approve or deny the application.

Environmental Assessment and Statement of Findings. The *Statement of Finding* document explains how the permit decision was made. This document is made available to the public.

The above steps are a basic example of the requirements to obtain an individual permit. The process may require additional steps such as a pre-application meeting with the US ACE district engineer or state officials or negotiation of mitigation plans.

Appendix G

Definitions

Unless specifically defined in this section, words or phrases are usually interpreted so as to give them the meaning they have in common usage.

1-year Frequency Storm—A storm event defined to be 2.5 inches in 24 hours.

2-year Frequency Storm—A storm event with a fifty (50) percent chance of being equaled or exceeded in a given year. Defined in general to be 3.3 inches in 24 hours.

5-year Frequency Storm—A storm event with a twenty (20) percent chance of being equaled or exceeded in any given year. Defined in general to be 4.1 inches in 24 hours.

10-year Frequency Storm—A storm event with a ten (10) percent chance of being equaled or exceeded in any given year. Defined in general to be 4.8 inches in 24 hours.

25-year Frequency Storm—A storm event with a four (4) percent chance of being equaled or exceeded in any given year. Defined in general to be 5.5 inches in 24 hours.

100-year Frequency Storm—A storm event with a one (1) percent chance of being equaled or exceeded in any given year. Defined in general to be 6.5 inches in 24 hours.

500-year Frequency Storm—A storm event with a one-fifth (1/5) of one (1) percent chance of being equaled or exceeded in any given year. Defined in general to be 7.6 inches in 24 hours.

100-year Flood Elevation—The elevation of the 100-year flood at any given location.

500-year Flood Elevation—The elevation of the 500-year flood at any given location.

Active Channel—The area of the stream that is most subject to water flow and that includes the portion of the channel below the top-of-bank.

As-Built Certification—As-built, field-verified plans signed and sealed by a registered professional engineer and/or a registered land surveyor, both licensed to practice in the State of Kentucky, showing contours, elevations, grades, locations, drainage and hydraulic structures, and detention basin volumes.

Base Flood Elevation (BFE)—The 100-year flood elevation at any given location.

Best Management Practices (BMP or BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, structural controls and other management practices designed to prevent or reduce the pollution of waters of the United States. BMPs may include structural devices or non-structural practices.

Best Management Practices Plan—An analysis of the drainage system for a proposed development and analysis of the proposed new drainage system that includes a map showing the extent of the land development activity and best management practices such as project phasing, erosion prevention and sediment control measures, stormwater pollution prevention measures, good housekeeping practices, drainage system controls, slope protection methods, vegetative measures, and other BMPs designed to keep pollutants out of the stormwater system and surface water bodies. Also known as a Storm Water Pollution Prevention Plan.

ants for Permanent Maintenance of Stormwater Facilities and Best Management Practices. The stormwater management plan also includes sufficient hydrologic calculations to determine the impact of the development on stormwater discharges.

Blue-Line Stream—Any stream that is shown on a 7.5 minute USGS quadrangle map, unless determined otherwise by the Kentucky Division of Water or US Army Corps of Engineers.

Channel—A natural watercourse of perceptible extent, with definite bed and banks to confine and conduct continuously or periodically flowing water (also, see Ditch).

Clearing—The removal of vegetation and/or disturbance of soil prior to grading or excavation in anticipation of construction or other activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities; for instance, cleared forested land in order to convert forest land to pasture for wildlife management purposes.

Commencement of Construction or Commencement of Land Disturbing Activities—The initial disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

Construction—Any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

Construction Related Wastes—Refuse or unused materials that can result from construction activities. Construction related wastes can include, but are not limited to, unused building and landscaping materials, chemicals, litter, sanitary waste, paint waste, and concrete truck washout.

Conveyance—The capacity of a channel, ditch, or pipe to carry stormwater.

Covenants for Permanent Maintenance of Stormwater Facilities and Best Management Practices—A legal document executed by the property owner, homeowners' association as owner of record, or other owner of real property which guarantees perpetual and proper maintenance of stormwater facilities and best management practices.

Critical Areas—Areas of construction activity that discharge directly into, or immediately upstream from, waters of the state recognized as impaired for siltation or those waters, or waters designated as high quality waters. A property is considered to have a direct discharge if stormwater runoff from the property does not cross any other property before entering waters of the state.

Development—Any land change that alters the hydrologic or hydraulic conditions of any property. Often referred to as "site development." Development includes, but is not limited to, providing access to a site, clearing of vegetation, grading, earth moving, providing utilities, roads and other services such as parking facilities, stormwater management and erosion control systems, potable water and wastewater systems, altering land forms, or construction or demolition of a structure on the land.

Discharge—Dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the stormwater system by any means intentional or otherwise.

Disturbed Area—Portion of any site that has been altered from existing conditions, including but not limited to the following: providing access to a site, clearing of vegetation, grading, earth moving, providing utilities and other services such as parking facilities, stormwater management and erosion control systems, potable water and wastewater systems, altering land forms, or construction or demolition of a structure on the land. Also called bare soil area.

Ditch—A man-made watercourse of perceptible extent, usually constructed for the purpose of draining surface water.

Drainage Basin—The area of land, buildings, roads, parking lots, and other surfaces contributing stormwater runoff to a single point.

Drainage System—The system of pipes, channels, culverts, and ditches that convey stormwater from and through public and private land.

Erosion—The removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by anthropogenic activities or effects.

Excavation—A cavity or hole in the land surface that is caused by the cutting, digging, or scooping and removal of soil, rock, or other materials.

Filling—Any deposit or stockpiling of dirt, rocks, stumps, or other natural or man-made solid material.

Flood—Water from a river, stream, watercourse, lake or other body of standing water that temporarily overflows and inundates adjacent lands and which may affect other lands and activities through increased surface water levels, and/or increased groundwater level.

Floodplain—The relatively flat or lowland area adjoining a river, stream, watercourse, lake, or other body of standing water, which has been or may be covered temporarily by flood water. Floodplains are typically assigned a recurrence interval (i.e., the 100-year floodplain) which defines the magnitude of the flood event that causes the inundation. The 100-year floodplain is the area subject to flood for the 100-year flood.

Flood Proofing—A combination of structural provisions, changes, or adjustments to properties and structures subject to flooding primarily for the reduction or elimination of flood damages to properties, water and sanitary facilities, structures, and contents of buildings in a flood hazard area.

Floodway—That portion of the stream channel and adjacent floodplain required for the passage or conveyance of a 100-year flood discharge without cumulatively increasing the 100-year water surface elevation more than one (1) foot. The floodway is the portion of special flood hazard area characterized by significant depths and velocities.

Floodway Encroachment—Any obstruction, fill, construction, improvement or other alteration that changes the hydraulic characteristics of the regulatory floodway.

Grading—Any clearing, excavating, filling or other disturbance of terrain.

Grading Permit—A permit issued by a local government authorizing the commencement of land disturbing activities.

High Quality Waters—Surface waters of the Commonwealth of Kentucky that are identified as Tier II or “high quality waters.” Includes most waters of the United States within the state. Characteristics include waters where existing conditions are better than water quality standards.

Illicit Discharge—Any discharge to the stormwater system that is not composed entirely of stormwater and not specifically exempted by state or federal regulations. Specifically, floor drains, wastewater treatment system discharges, cesspool discharges, sink drains, and all other non-stormwater discharges to the stormwater system and surface streams are illicit discharges, whether discharged directly or through a pipe, ditch, swale, drain tile, rolling stock, or other manmade conveyance.

Impervious Area—Impermeable surfaces which prevent the percolation of water into the soil including, but not limited to, pavement, parking areas and driveways, packed gravel or soil, or rooftops.

Kentucky Pollutant Discharge Elimination System (NPDES)—The program administered by The Commonwealth of Kentucky for the United States Environmental Protection Agency to eliminate or reduce pollutant discharges to the waters of the United States. (See also National Pollutant Discharge Elimination System.)

Lake—An inland body of standing water, usually of considerable size.

Land Disturbing Activity—Any activity on a property that results in a change in the existing soil (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, logging and/or tree chipping operations, haul roads associated with the development, and excavation.

Municipal Separate Storm Sewer System (MS4)—A conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, constructed channels, and storm drains) designed or used for collecting or conveying stormwater. However, sanitary and combined sewers are not included in the definition of the Municipal Separate Storm Sewer System.

National Pollutant Discharge Elimination System (NPDES)—The program administered by the United States Environmental Protection Agency to eliminate or reduce pollutant discharges to the waters of the United States. In Kentucky, known as the Kentucky Pollutant Discharge Elimination System.

Natural Resources Conservation Service (NRCS)—An organization within the U.S. Department of Agriculture that has published standard drainage procedures in the form of Technical Release No. 55. Formerly known as the Soil Conservation Service (SCS).

Outfall—The terminus of a stormwater system where the contents are released into a larger public or private stormwater management system, or into a stream or other water body.

Owner or Operator—Any party associated with a construction project that meets either of the following two criteria: a) The party has operational control over construction plans and specifications, including the ability to authorize modifications to those plans and specifications (this will typically be the owner or developer); or b) The party has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a Best Management Practices Plan (also known as a stormwater pollution prevention plan) for the site or other permit conditions, e.g., they are authorized to direct workers at a site to carry out activities required by the BMP Plan or comply with other permit conditions. (This will typically include the general contractor and can also include excavation contractors and erosion control contractors.) Owners and/or operators are required to ensure permit coverage for all construction sites with a disturbed area of one acre or more.

Pond—An inland body of standing water that is usually smaller than a lake.

Peak Discharge—The maximum instantaneous rate of flow of water at a particular point resulting from a storm event. Also, the maximum discharge computed for a given design flood event.

Person—Any individual, firm, corporation, partnership, association, organization or entity, including governmental entities, or any combination thereof.

Public Water—Stormwater runoff that originates in whole or part from or is conveyed by publicly owned facilities such as roads.

Redevelopment—The improvement of a lot or lots that have been previously developed.

Riprap—A combination of large stone, cobbles and boulders used to line channels, stabilize stream banks, and reduce runoff velocities.

Runoff—The water resulting from precipitation that is not absorbed by the soil. Also can be referred to as stormwater runoff.

Sanitary Sewer—A system of underground conduits that collects and delivers wastewater from toilets, sinks and other plumbing fixtures to a wastewater treatment plant.

Sediment—Solid material, either mineral or organic, that is in suspension, is being transported, or has been moved from its site of origin by erosion.

Sewage—Human wastes carried by water from residences, buildings, industrial establishments or other places, together with such industrial wastes, stormwater or other water as may be present; or any substance discharged from a sanitary sewer collection system.

Sinkhole—A depression in karst areas, often but not always characterized by closed contours on a topographic map. A sinkhole throat, or opening to the subsurface, may or may not be visible. Field verification may be required in areas where the depth of the depression is below the tolerance of currently available topographic mapping. The extent of the area considered to be a sinkhole includes an appropriate vegetated or other buffer zone to ensure filtration and protection from contamination by surface runoff.

Stormwater—Runoff from rain, snow or other forms of precipitation, which results in surface runoff and drainage.

Stormwater System—The system of roadside drainage, roadside curbs and gutters, curb inlets, swales, catch basins, manholes, gutters, ditches, pipes, lakes, ponds, sinkholes, channels, creeks, streams, storm drains, water quality best management practices, and similar conveyances and facilities, both natural and manmade, which are designated or used for collecting, storing, or conveying stormwater, or through which stormwater is collected, treated, stored or conveyed. Stormwater Management Facilities—Structures and constructed features designed for the collection, conveyance, storage, treatment and disposal of stormwater runoff into and through the stormwater system. Stormwater management facilities include vegetative or structural measures, or both, to control the increased volume, rate, and quality of stormwater runoff caused by manmade changes to the land.

Stormwater Pollution Prevention Plan—An analysis of the drainage system for a proposed development and analysis of the proposed new drainage system that includes a map showing the extent of the land development activity and best management practices such as project phasing, erosion prevention and sediment control measures, stormwater pollution prevention measures, good housekeeping practices, drainage system controls, slope protection methods, vegetative measures, and other BMPs designed to keep pollutants out of the stormwater system and surface water bodies. Also known as a Best Management Practices Plan.

Stormwater Master Plan—An engineering and planning study for the drainage system of a watershed that consists of a plan for stormwater management in the watershed. Stormwater master plans can address flooding problems, water quality problems, potential stormwater capital improvements, land use patterns, and regulatory issues for existing and future conditions.

Stream—A linear surface water conveyance that can be characterized with either perennial or ephemeral base flow. Characterized as a blue line on a 7.5-minute USGS quadrangle, or as any natural surface water conveyance that has a defined bed and banks, which carries runoff water or base flow.

Structure—Anything constructed or erected such that the use of it requires a more or less permanent location on or in the ground. Such construction includes, but is not limited to, objects such as buildings, towers, smokestacks, overhead transmission lines, carports and walls.

Top of Bank—The uppermost limit of the active channel of a stream containing normal flows, usually marked by a break in slope. Often referred as the elevation of flowing water during bankfull flows, which occur every 2-3 years.

Total Maximum Daily Load (TMDL)—A calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the source(s) of the pollutant.

Transporting—Any moving of earth materials from one place to another, other than such movement incidental to grading, as authorized on an approved plan.

USACE—United States Army Corps of Engineers. Utility, public or private—Any agency which under public franchise or ownership, or under certification of convenience and necessity provides the public with electricity, natural gas, steam, communication, rail transportation, water, sewage collection, or other similar service.

Vegetation—Collection of plant life, including trees, shrubs, bushes, and grass.

Wastes, industrial/commercial—Liquid or other wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resources.

Wastes, other—Decayed wood; sawdust; shavings; fallen bark; fallen leaves; lawn clippings; animal wastes; used or previously applied lime; garbage; trash; refuse, loose used paper, paper products, plastic containers, or metal containers; ashes, offal, discarded tar; discarded paint; discarded or uncontained solvents; used, discarded, or spilled petroleum products, antifreeze, motor vehicle fluids; used or discarded tires, gas tanks, or chemicals; or any other used, uncontained, or unpackaged, or disposed of materials which may discharge to or otherwise enter the stormwater system.

Waters or Waters of the State—Any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through or border upon Kentucky or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

Water Quality Buffer—A use-restricted, vegetated area that is located along the perimeter of local waters, containing natural vegetation and grasses, enhanced or restored vegetation.

Watercourse—A channel, natural depression, gully, stream, creek, pond, reservoir or lake in which stormwater runoff and floodwater flows either regularly or infrequently. This includes major drainageways for carrying urban stormwater runoff.

Watershed—A region or area bounded peripherally by a divide and draining ultimately to a particular watercourse or body of water.

Wetlands—An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetland determination shall be made by the United States Army Corps of Engineers, and/or the Kentucky Division of Water, and/or the Natural Resources Conservation Service.